

### **REMARKS**

The final Office Action dated December 24, 2009, has been reviewed carefully and the application has been amended in a sincere effort to address all objections and rejections. It is believed that the present amendment places the claims in condition for allowance.

Claims 30- 31 and 33 - 48 are pending in the case.

Claims 1 – 29 were previously cancelled. Claims 32 and 49 have been cancelled herein.

#### ***Claim Objections***

Claim 41 is objected to based upon various informalities. The claim has been amended to recite in line 4, “~~said~~ at least one physical quantity” and in line 6-7, “said at least one physical quantity.” The Applicant respectfully thanks the Examiner for pointing out these typographical errors.

Claim 47 was objected to based upon various informalities. The subject matter of Claim 49 has been incorporated into Claim 47. It is believed that the language that was objected to was stated in Claim 49. Claim 47 now including the subject matter of Claim 49 has been amended in line 3 to recite a “read and write” memory.

It is respectfully submitted that the objections to the claims have been addressed by the amendments herein.

#### ***Claim Rejections – 35 U.S.C. §112***

Claim 47 was rejected under 35 U.S.C. 112, second paragraph. Applicant has thus amended Claim 47 to recite, “that permits the microprocessor to build in the

~~nonvolatile read and write~~ memory, profiles....”

Applicant respectfully submits that the rejection pursuant to 35 U.S.C. §112, second paragraph has been overcome.

***Claim Rejections – 35 U.S.C. §103***

Claims 30 – 49 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,453,687 to Sharood et al. (“Sharood”) in view of U.S. Patent Application Publication US 2002/0124081 to Primm et al. (“Primm”). Claims 32 and 49 have been cancelled.

As stated in earlier prosecution, Sharood is directed to a refrigerator monitoring unit, which is a retrofit plug, as in Fig. 6A. The Sharood device is a “plug-through device that is either attached in line with the main appliance electrical supply or internally in line with a main control board interface connector of an appliance.” (Col. 8, lines 14 – 17). As illustrated in Fig. 26B of Sharood, the compartment 2610 is located in line with the electric power supply 2601. The retrofit plug can be used to alert the user that the power is out and how long until food spoilage will occur. Col. 27, lines 51- 53, and lines 55 – 58

In contrast, Applicant’s invention of Claims 30 and 41, involves measuring at least one physical quantity that can be sensed by internal sensors and comparing the resulting measurements to stored predefined values for the respective physical quantity over a predetermined time period.

Regarding independent Claim 41, as amended, Sharood is silent as to storing a plurality of measurements of at least one physical quantity within a predetermined time period, and the storing of a last measurement of at least one physical quantity causes the

deletion of a first stored measurement within the plurality of values during a predetermined time period. Sharood further does not specify a microcontroller that is configured to, *inter alia*, extrapolate from a plurality of measurements of at least one physical quantity a data packet representative of the evolution of the at least one physical quantity within the predefined time period, as in Applicant's claimed invention.

Sharood does not teach comparing a value of at least one physical quantity with one or more predefined values that relate to the values for the treatment being performed by the appliance. Sharood has no concept of various treatment cycles to be performed by the appliance. Other appliances, such as washing machines, dryers, cooktops and ovens typically involve different treatments for its operation as selected by the user. Such information could not be obtained using Sharood's retrofit plug.

With respect to amended independent Claim 47, Sharood does not specify that a combination of values of at least one physical external quantity, physical internal quantity and at least one electrical quantity are compared with a reference combination of physical and electrical quantities being the combination that best represents the proper operation of the appliance at that instant in time. (See: Specification, Page 11, lines 13 – 18).

As Sharood fails to disclose, teach or suggest numerous key features of Applicant's claimed invention, then Applicant's claimed invention is not rendered obvious over Sharood alone.

Turning to the Primm reference, Primm is wholly unrelated to household electric appliances. Primm describes a set of "network appliances," which are computers that can be coupled in communicating relationship with one another by way of an interconnecting

network 32 (Fig. 2). Each network appliance 110 is a computer that has a number of components including a storage medium 120, which stores data 132 (Fig. 9 and Paragraph 0105). Specifically, the network appliance 110 of Primm is a computer in a network of computers that may be used as file systems for storing and retrieving data for a user. Though sensors are provided in Primm to maintain a controlled environment in which the Primm storage appliance operates, Primm's network appliance is not a monitoring device and does not execute a monitoring function of a household appliance, such as a washing machine as in the Applicant's claimed monitoring device and system. (See: Specification, Page 4, lines 12 -13). In Applicant's household appliance environment, one skilled in the art would not look to a reference that relates to a computer storage network.

Furthermore, Primm specifies that a network enabled appliance establishes a relationship with a peer network-enabled appliance. The network enabled appliance may ping a peer appliance to determine the state of operability of the pinged device. (Paragraph 0020). This teaches away from Applicant's invention because Applicant's monitoring device is intended to monitor the appliance with which the monitoring device is associated. Applicant's household appliance does not require another household appliance to monitor it.

In further contrast to Primm, Applicant's appliance is monitored continuously and the combination of values of interest are compared with predetermined stored values to determine proper operation of the appliance for the treatment at that instant in time. The information obtained during the monitoring can also be used to generate statistical data about, for example, the usage of a washing machine ...to determine which is the most

used program among a series of wash programs available in the washing machine. (Specification, Page 13, lines 17 – 23). Primm is not directed to determining a most used program and the like. Thus, Primm alone does not disclose, teach or render obvious Applicant's claimed invention.

The combination of Sharood and Primm further does not render Applicant's claimed invention obvious. Indeed, there is no incentive for one skilled in the art to combine Sharood's retrofit refrigerator plug with Primm's network of interconnected computers. Even if Sharood is combined with Primm, the Primm teachings would require a second appliance to determine whether there is a problem in operability with a first appliance. Additionally, neither Sharood nor Primm teaches measuring at least one physical quantity and comparing the measurement to a stored predefined value for such physical quantity, over a predetermined time period. The combination does not disclose teach or suggest one or more predefined values that relate to the values for the treatment being performed by the appliance. The combination further does not suggest a combination of values of at least one physical external quantity, physical internal quantity and at least one electrical quantity that are compared with a reference combination of physical and electrical quantities being the combination that best represents the proper operation of the appliance at a selected instant in time.

Accordingly, as both references are devoid of a number of Applicant's key features, and the combination of the references still does not give rise to Applicant's invention, it is thus respectfully submitted that the combination of the Sharood and Primm references does not render Applicant's claimed invention obvious.

#### **SUMMARY**

All of the claims have been amended herein either directly or through dependency, which amendments were made in order to enhance the claims, to better claim the invention and to further clarify the distinctions which Applicant's invention has over the cited references. Support for these amendments may be found throughout the originally filed Specification, and for example, at Page 8, lines 25 – 29 and Page 8, lines 19 – 23.

All independent claims are believed to be allowable. It is believed that all dependent claims depend from allowable independent claims. Thus, it is believed that all dependent claim are similarly allowable.

Accordingly, it is respectfully submitted that the application is in condition for allowance.

Please do not hesitate to contact the undersigned in order to further the prosecution of this application in any respect.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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